

976-20 PCT US seq list with priority claims
SEQUENCE LISTING

<110> Center for Genetic Engineering and Biotechnology

<120> ANTIBODY FRAGMENTS SPECIFIC FOR HUMAN CARCINOEMBRYONIC
ANTIGEN (CEA)

<130> 976-20 PCT/US

<140> Unassigned

<141> 2004-10-19

<150> PCT/CU2003/000005

<151> 2003-04-28

<150> CU2002/0086

<151> 2002-04-09

<160> 21

<170> PatentIn Ver. 2.1

<210> 1

<211> 39

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: oligo

<400> 1

ggggatatcc accatgract tcgggytgag ctkggtttt

39

<210> 2

<211> 29

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: oligo

<400> 2

aytccacac acaggrccag tggatagac

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<211> 40

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: oligo

<400> 3

ggggatatcc accatggagw cacakwctca ggtctttrta

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<210> 4

<211> 21

<212> DNA

<213> Artificial Sequence

<220>

976-20 PCT US seq list with priority claims

<223> Description of Artificial Sequence: oligo

<400> 4

actggatggt gggaagatgg a

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<210> 5

<211> 14

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: linker I

<400> 5

Glu Gly Lys Ser Ser Gly Ser Gly Ser Glu Ser Lys Val Asp
1 5 10

<210> 6

<211> 5

<212> PRT

<213> Artificial Sequence

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<223> Description of Artificial Sequence: linker II

<400> 6

Gly Gly Gly Gly Ser
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<210> 7

<211> 39

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: oligo

<400> 7

tctcacagtg cacaggaagt gaagctggtg gagtctggg

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<211> 63

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence: oligo

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60 63

<210> 9

<211> 62

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: oligo

976-20 PCT US seq list with priority claims

<400> 9
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tc 62

<210> 10
<211> 37
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligo

<400> 10
aaggaaaaa gcggccgctt tcagctccag cttgggt 37

<210> 11
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<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligo

<400> 11
agagccgccg ccacctgagg agactgtgag agtggt 36

<210> 12
<211> 36
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligo

<400> 12
ggtggcggcg gctctgacat tgtgatgacc cagtct 36

<210> 13
<211> 108
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: vector

<400> 13
cctttctatt ctcacagtgc acaggaaatc aaagcggccg cagggtccga acaaaaaactc 60
atctcagaag aggatctgaa ttcccatcat catcaccatc actaataa 108

<210> 14
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligo

<400> 14

976-20 PCT US seq list with priority claims
gttggttcctt tctattctca c 21

<210> 15
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: oligo

<400> 15
ctcttctgag atgagttttt gtgc 24

<210> 16
<211> 241
<212> PRT
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: scFv

<400> 16
Glu Val Lys Leu Val Glu Ser Gly Gly Asp Leu Val Lys Pro Gly Gly
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20 25 30
Ala Met Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val
35 40 45
Ala Phe Ile Ser Ser Asp Gly Ile Ala Tyr Tyr Ala Asp Ser Val Lys
50 55 60
Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Ile Leu Tyr Leu
65 70 75 80
Gln Met Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ala
85 90 95
Arg Val Tyr Tyr Tyr Gly Ser Ser Tyr Phe Asp Tyr Trp Gly Gln Gly
100 105 110
Thr Thr Leu Thr Val Ser Ser Glu Gly Lys Ser Ser Gly Ser Gly Ser
115 120 125
Glu Ser Lys Val Asp Asp Ile Val Met Thr Gln Ser Pro Lys Phe Met
130 135 140
Ser Thr Ser Val Gly Asp Arg Val Ser Val Thr Cys Lys Ala Ser Gln
145 150 155 160
Asn Ala Gly Thr Asn Val Ala Trp Tyr Gln Gln Lys Pro Gly Gln Ser
165 170 175
Pro Lys Ala Leu Ile Tyr Ser Ala Ser Ser Arg Asn Ser Gly Val Pro
180 185 190
Asp Arg Ile Thr Gly Ser Gly Ser Gly Thr Asp Phe Thr Leu Thr Ile
195 200 205
Ser Asn Val Gln Ser Glu Asp Leu Ala Glu Tyr Phe Cys Gln Gln Tyr

976-20 PCT US seq list with priority claims

210

215

220

Asn Ser Tyr Pro Leu Val Thr Phe Gly Ala Gly Thr Lys Leu Glu Leu
225 230 235 240

Lys

<210> 17

<211> 232

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: diabody

<400> 17

Glu Val Lys Leu Val Glu Ser Gly Gly Asp Leu Val Lys Pro Gly Gly
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Ser Leu Lys Phe Ser Cys Ala Ala Ser Gly Phe Pro Phe Asn Arg Tyr
20 25 30

Ala Met Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val
35 40 45

Ala Phe Ile Ser Ser Asp Gly Ile Ala Tyr Tyr Ala Asp Ser Val Lys
50 55 60

Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Ile Leu Tyr Leu
65 70 75 80

Gln Met Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ala
85 90 95

Arg Val Tyr Tyr Tyr Gly Ser Ser Tyr Phe Asp Tyr Trp Gly Gln Gly
100 105 110

Thr Thr Leu Thr Val Ser Ser Gly Gly Gly Gly Ser Asp Ile Val Met
115 120 125

Thr Gln Ser Pro Lys Phe Met Ser Thr Ser Val Gly Asp Arg Val Ser
130 135 140

Val Thr Cys Lys Ala Ser Gln Asn Ala Gly Thr Asn Val Ala Trp Tyr
145 150 155 160

Gln Gln Lys Pro Gly Gln Ser Pro Lys Ala Leu Ile Tyr Ser Ala Ser
165 170 175

Ser Arg Asn Ser Gly Val Pro Asp Arg Ile Thr Gly Ser Gly Ser Gly
180 185 190

Thr Asp Phe Thr Leu Thr Ile Ser Asn Val Gln Ser Glu Asp Leu Ala
195 200 205

Glu Tyr Phe Cys Gln Gln Tyr Asn Ser Tyr Pro Leu Val Thr Phe Gly
210 215 220

Ala Gly Thr Lys Leu Glu Leu Lys
225 230

976-20 PCT US seq list with priority claims

<210> 18
 <211> 35
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: oligo

<400> 18
 catgccatgg ggaatccgaa gtgaagctgg tggag 35

<210> 19
 <211> 36
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: oligo

<400> 19
 catgccatgg atcccggggt gatggtgatg gtgatg 36

<210> 20
 <211> 21
 <212> DNA
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: diabody MS

<400> 20
 gactggttcc aattgacaag c 21

<210> 21
 <211> 255
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Description of Artificial Sequence: diabody MS

<400> 21
 Glu Val Lys Leu Val Glu Ser Gly Gly Asp Leu Val Lys Pro Gly Gly
 1 5 10 15
 Ser Leu Lys Phe Ser Cys Ala Ala Ser Gly Phe Pro Phe Asn Arg Tyr
 20 25 30
 Ala Met Ser Trp Val Arg Gln Thr Pro Glu Lys Arg Leu Glu Trp Val
 35 40 45
 Ala Phe Ile Ser Ser Asp Gly Ile Ala Tyr Tyr Ala Asp Ser Val Lys
 50 55 60
 Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Arg Asn Ile Leu Tyr Leu
 65 70 75 80
 Gln Met Ser Ser Leu Arg Ser Glu Asp Thr Ala Met Tyr Tyr Cys Ala
 85 90 95
 Arg Val Tyr Tyr Tyr Gly Ser Ser Tyr Phe Asp Tyr Trp Gly Gln Gly

976-20 PCT US seq list with priority claims

100

105

110

Thr Thr Leu Thr Val Ser Ser Gly Gly Gly Gly Ser Asp Ile Ile Met
115 120 125
Thr Gln Ser Pro Lys Phe Met Ser Thr Ser Val Gly Asp Arg Val Ser
130 135 140
Val Thr Cys Lys Ala Ser Gln Asn Ala Gly Thr Asn Val Ala Trp Tyr
145 150 155 160
Gln Gln Lys Pro Gly Gln Ser Pro Lys Ala Leu Ile Tyr Ser Ala Ser
165 170 175
Ser Arg Asn Ser Gly Val Pro Asp Arg Ile Thr Gly Ser Gly Ser Gly
180 185 190
Thr Asp Phe Thr Leu Thr Ile Ser Asn Val Gln Ser Glu Asp Leu Ala
195 200 205
Glu Tyr Phe Cys Gln Gln Tyr Asn Ser Tyr Pro Leu Val Thr Phe Gly
210 215 220
Ala Gly Thr Lys Leu Glu Leu Lys Ala Ala Ala Gly Ser Glu Gln Lys
225 230 235 240
Leu Ile Ser Glu Glu Asp Leu Asn Ser His His His His His His
245 250 255